

Application No. 09/724,567
Amendment dated January 23, 2004
Response to the Final Office Action mailed October 23, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-57: (Canceled)

Claim 58. (New) A method of prophylaxis of Alzheimer's disease in a mammalian subject, comprising administering to the subject a dosage of synuclein-NAC effective to produce an immune response comprising anti-synuclein antibodies and an adjuvant that augments the immune response to the synuclein, wherein said administering further comprises administering A β , and thereby effecting prophylaxis of the disease.

Claim 59. (New) The method of claim 58, wherein said synuclein or fragment thereof is linked to a carrier protein.

Claim 60. (New) The method of claim 58, wherein said adjuvant is selected from the group consisting of QS21, monophosphoryl lipid, and alum.

Claim 61. (New) The method of claim 58, wherein said immune response is characterized by a serum titer of the anti-synuclein antibodies of at least 1:1000 with respect to said A β .

Claim 62. (New) The method of claim 61, wherein said serum titer of the anti-synuclein antibodies is at least 1:5000 with respect to said A β .

Claim 63. (New) The method of claim 58, wherein said immune response is characterized by a serum titer of anti-synuclein antibodies corresponding to greater than about four times higher than a serum titer of anti-A β antibodies of measured in a pre-treatment control serum sample.

Claim 64. (New) The method of claim 63, wherein said serum titer of the antibodies is measured at a serum dilution of about 1:100.

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Claim 65. (New) A method of treating Alzheimer's disease in a mammalian subject, comprising administering to the subject a dosage of synuclein-NAC effective to produce an immune response comprising anti-synuclein antibodies and an adjuvant that augments the immune response to the synuclein, wherein said administering further comprises administering A β , and thereby treating the disease.

Claim 66. (New) The method of claim 65, wherein said synuclein or fragment thereof is linked to a carrier protein.

Claim 67. (New) The method of claim 65, wherein said adjuvant is selected from the group consisting of QS21, monophosphoryl lipid, and alum.

Claim 68. (New) The method of claim 65, wherein said immune response is characterized by a serum titer of the anti-synuclein antibodies of at least 1:1000 with respect to said A β .

Claim 69. (New) The method of claim 68, wherein said serum titer of the anti-synuclein antibodies is at least 1:5000 with respect to said A β .

Claim 70. (New) The method of claim 65, wherein said immune response is characterized by a serum titer of anti-synuclein antibodies corresponding to greater than about four times higher than a serum titer of anti-A β antibodies of measured in a pre-treatment control serum sample.

Claim 71. (New) The method of claim 70, wherein said serum titer of the antibodies is measured at a serum dilution of about 1:100,